

CLAIMS

1. Apparatus for use in a server to transmit data to a plurality of receiving terminals, the apparatus comprising:
transmitting logic to transmit the data and an acknowledgement value from the server to the plurality of receiving terminals; and
receiving logic to receive an acknowledgement signal from selected receiving terminals, wherein the selected receiving terminals comprise a portion of the plurality of receiving terminals where a locally generated random response value has a selected relationship to the acknowledgement value.
2. The apparatus of claim 1, wherein the transmitting logic further comprises logic to transmit the acknowledgement value to the plurality of receiving terminals using an out of band transmission.
3. The apparatus of claim 1, wherein the selected relationship occurs when the response value is greater than the acknowledgement value.
4. The apparatus of claim 1, wherein the processing logic further comprises logic to use the acknowledgement signals transmitted from the selected receiving terminals to determine a probability of reception.
5. The apparatus of claim 4, wherein the processing logic further comprises logic to re-transmit the data from the server if the probability of reception is below a selected service level.
6. The apparatus of claim 4, wherein the processing logic further comprises logic to terminate the transmission of the data from the server if the probability of reception is above a selected service level.
7. The apparatus of claim 1, wherein the processing logic further comprises logic to adjust the acknowledgement value to adjust the number of acknowledgement signals received at the server.

8. The apparatus of claim 1, wherein the transmitting logic further comprises logic to transmit the data from the server to the plurality of receiving terminals using a multicast transmission.
9. A method for use in a server to transmit data to a plurality of receiving terminals, the method comprising:
 - transmitting the data and an acknowledgement value from the server to the plurality of receiving terminals; and
 - receiving an acknowledgement signal from selected receiving terminals, wherein the selected receiving terminals comprise a portion of the plurality of receiving terminals where a locally generated random response value has a selected relationship to the acknowledgement value.
10. The method of claim 9, further comprising transmitting the acknowledgement value to the plurality of receiving terminals using an out of band transmission.
11. The method of claim 9, wherein the selected relationship occurs when the response value is greater than the acknowledgement value.
12. The method of claim 9, further comprising using the acknowledgement signals transmitted from the selected receiving terminals to determine a probability of reception.
13. The method of claim 12, further comprising re-transmitting the data from the server if the probability of reception is below a selected service level.
14. The method of claim 12, further comprising terminating the transmission of the data from the server if the probability of reception is above a selected service level.
15. The method of claim 9, further comprising adjusting the acknowledgement value to adjust the number of acknowledgement signals received at the server.

16. The method of claim 9, further comprising transmitting the data from the server to the plurality of receiving terminals using a multicast transmission.
17. Apparatus for use in a server to transmit data to a plurality of receiving terminals, the method comprising:
 - means for transmitting the data and an acknowledgement value from the server to the plurality of receiving terminals; and
 - means for receiving an acknowledgement signal from selected receiving terminals, wherein the selected receiving terminals comprise a portion of the plurality of receiving terminals where a locally generated random response value has a selected relationship to the acknowledgement value.
18. The apparatus of claim 17, further comprising means for transmitting the acknowledgement value to the plurality of receiving terminals using an out of band transmission.
19. The apparatus of claim 17, wherein the selected relationship occurs when the response value is greater than the acknowledgement value.
20. The apparatus of claim 17, further comprising means for using the acknowledgement signals transmitted from the selected receiving terminals to determine a probability of reception.
21. The apparatus of claim 20, further comprising means for re-transmitting the data from the server if the probability of reception is below a selected service level.
22. The apparatus of claim 20, further comprising means for terminating the transmission of the data from the server if the probability of reception is above a selected service level.

23. The apparatus of claim 17, further comprising means for adjusting the acknowledgement value to adjust the number of acknowledgement signals received at the server.
24. The apparatus of claim 17, further comprising means for transmitting the data from the server to the plurality of receiving terminals using a multicast transmission.
25. A computer-readable media comprising instructions, which when executed by processing logic in a server, operate to transmit data to a plurality of receiving terminals, the computer-readable media comprising:
 - instructions for transmitting the data and an acknowledgement value from the server to the plurality of receiving terminals; and
 - instructions for receiving an acknowledgement signal from selected receiving terminals, wherein the selected receiving terminals comprise a portion of the plurality of receiving terminals where a locally generated random response value has a selected relationship to the acknowledgement value.
26. The computer-readable media of claim 25, further comprising instructions for transmitting the acknowledgement value to the plurality of receiving terminals using an out of band transmission.
27. The computer-readable media of claim 25, wherein the selected relationship occurs when the response value is greater than the acknowledgement value.
28. The computer-readable media of claim 25, further comprising instructions for using the acknowledgement signals transmitted from the selected receiving terminals to determine a probability of reception.
29. The computer-readable media of claim 28, further comprising instructions for re-transmitting the data from the server if the probability of reception is below a selected service level.

30. The computer-readable media of claim 28, further comprising instructions for terminating the transmission of the data from the server if the probability of reception is above a selected service level.
31. The computer-readable media of claim 25, further comprising instructions for adjusting the acknowledgement value to adjust the number of acknowledgement signals received at the server.
32. The computer-readable media of claim 25, further comprising instructions for transmitting the data from the server to the plurality of receiving terminals using a multicast transmission.
33. Apparatus for use in a receiving terminal to receive data transmitted to a plurality of receiving terminals from a server, the apparatus comprising:
 - receiving logic to receive the data and an acknowledgement value transmitted from the server;
 - generating logic to generate a random response value;
 - processing logic to compare the response value to an acknowledgement value; and
 - transmitting logic to transmit an acknowledgment signal to the server from the receiving terminal if the response value has a selected relationship to the acknowledgement value.
34. The apparatus of claim 33, wherein the receiving logic further comprises logic to receive the acknowledgement value using an out of band transmission.
35. The apparatus of claim 33, wherein the selected relationship occurs when the response value is greater than the acknowledgement value.
36. The apparatus of claim 33, wherein the receiving logic further comprises logic to receive the data in a multicast transmission from the server.
37. A method for use in a receiving terminal to receive data transmitted to a plurality of receiving terminals from a server, the method comprising:

receiving the data and an acknowledgement value transmitted from the server;

generating a random response value;

comparing the response value to the acknowledgement value; and

transmitting an acknowledgment signal to the server if the response value has a selected relationship to the acknowledgement value.

38. The method of claim 37, further comprising receiving the acknowledgement value using an out of band transmission.
39. The method of claim 37, wherein the selected relationship occurs when the response value is greater than the acknowledgement value.
40. The method of claim 37, further comprising receiving the data in a multicast transmission from the server.
41. Apparatus for use in a receiving terminal to receive data transmitted to a plurality of receiving terminals from a server, the apparatus comprising:
 - means for receiving the data and an acknowledgement value transmitted from the server;
 - means for generating a random response value;
 - means for comparing the response value to the acknowledgement value; and
 - means for transmitting an acknowledgment signal to the server if the response value has a selected relationship to the acknowledgement value.
42. The apparatus of claim 41, further comprising means for receiving the acknowledgement value using an out of band transmission.
43. The apparatus of claim 41, wherein the selected relationship occurs when the response value is greater than the acknowledgement value.
44. The apparatus of claim 41, further comprising means for receiving the data in a multicast transmission from the server.

45. A computer-readable media comprising instructions, which when executed by processing logic in a receiving terminal, operate to receive data transmitted from a server to a plurality of receiving terminals, the computer-readable media comprising:
- instructions for receiving the data and an acknowledgement value transmitted from the server;
 - instructions for generating a random response value;
 - instructions for comparing the response value to the acknowledgement value; and
 - instructions for transmitting an acknowledgment signal to the server if the response value has a selected relationship to the acknowledgement value.
46. The computer-readable media of claim 45, further comprising instructions for receiving the acknowledgement value using an out of band transmission.
47. The computer-readable media of claim 45, wherein the selected relationship occurs when the response value is greater than the acknowledgement value.
48. The computer-readable media of claim 45, further comprising instructions for receiving the data in a multicast transmission from the server.
49. Apparatus for use in a receiving terminal to receive data transmitted to a plurality of receiving terminals from a server, the apparatus comprising:
- receiving logic to receive the data and an acknowledgement value transmitted from the server, and wherein the receiving logic operates to detect a data reception error;
 - generating logic to generate a random response value;
 - processing logic to compare the response value to an acknowledgement value; and
 - transmitting logic to transmit a negative acknowledgment signal to the server from the receiving terminal if a data reception error is detected and

the response value has a selected relationship to the acknowledgement value.

50. The apparatus of claim 49, wherein the receiving logic further comprises logic to receive the acknowledgement value using an out of band transmission.
51. The apparatus of claim 49, wherein the selected relationship occurs when the response value is greater than the acknowledgement value.
52. The apparatus of claim 49, wherein the receiving logic further comprises logic to receive the data in a multicast transmission from the server.
53. The apparatus of claim 49, further comprising timing logic that is operable to measure a selected time interval.
54. The apparatus of claim 53, wherein the transmitting logic transmits the negative acknowledgement signal at the end of the selected time interval.
55. The apparatus of claim 54, wherein the selected time interval is a random time interval.